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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,494	07/29/2003	Satoshi Hirai	0229-0766P	5038
2292	7590	03/22/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			MAKI, STEVEN D	
PO BOX 747			ART UNIT	PAPER NUMBER
FALLS CHURCH, VA 22040-0747			1733	

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/628,494

Applicant(s)

HIRAI, SATOSHI

Examiner

Steven D. Maki

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Art Unit: 1733

1) The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The specification to which the oath or declaration is directed has not been adequately identified. See MPEP § 602.

The declaration filed 9-26-03, which identifies Attorney Docket Number 0229-0766P (the same docket number identified in the transmittal letter filed 7-29-03), refers to "the specification of which is attached hereto" instead of application 10/628494 filed 7-29-03. However, no specification having a date of 9-26-03 has been received.

2) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3) Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al (US 5766383) in view of Japan 408 (JP 59-179408) and/or German 017 (DE 3924017).

Hasegawa et al, directed to *reducing tire noise*, discloses a pneumatic tire having five land portions wherein at least one of the five land portions has a set of lateral grooves to define blocks. The lateral grooves comprise alternating wide lateral grooves and narrow lateral grooves. The width WB of the narrow lateral grooves is not more than 0.80 times the width of the wide lateral grooves. See col. 1 lines 45-67, col. 2 lines 1-11, col. 3 lines 52-65, col. 5 lines 4-16. The five land portions comprise shoulder

Art Unit: 1733

blocks in a row along each tread edge. The alternating widths of the lateral grooves in a shoulder row is best seen in figure 3. Hence, Hasegawa et al teaches a shoulder block row having alternating wide lateral shoulder grooves and **narrow lateral shoulder grooves** wherein the ratio of the width of the wide lateral groove (WL) to the width of the narrow lateral grooves (WS) is greater than 1.25 ($1 / 0.8$). Hasegawa does not recite $(WLo/WS_o) > (WLi/WS_i)$.

As to claim 1, it would have been obvious to one of ordinary skill in the art to gradually increase the width of both Hasegawa's narrow lateral grooves and wide lateral grooves from the circumferential groove to the tread edge and thereby establish $(WLo/WS_o) > (WLi/WS_i)$ in view of the suggestion from Japan 408 and/or German 017 to gradually increase the width of all shoulder lateral grooves toward the tread edge to reduce noise.

As to claim 2, note the suggestion from Japan 408 and/or German to provide all the shoulder lateral grooves such that the outer width is larger than the inner width in order to reduce noise.

4) Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al in view of Japan 408 and/or German 017 as applied above and further in view of Europe 391 (EP 1106391).

As to claim 3, it would have been obvious to one of ordinary skill in the art to provide Hasegawa et al's shoulder lateral grooves such that the claimed ratios (1.1-1.8 and 0.9-1.1) are satisfied since (1) Hasegawa et al teaches sizing the widths of the shoulder lateral grooves such that the width ratio is at least 1.25 is reduce noise and (2)

Art Unit: 1733

Europe 391, which also teaches using alternating wide shoulder grooves and narrow shoulder grooves, recognizes that improvement in reducing noise can be obtained if the width ratio is as low as 1.0 (paragraph 22).

5) Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al in view of Japan 408 and/or German 017 as applied above and further in view of Sulkowski (US 5501258).

As to claim 4, it would have been obvious to one of ordinary skill in the art to provide Hasegawa et al's shoulder lateral grooves with the claimed crank shape since Sulkowski teaches using a crank shape for shoulder lateral grooves to reduce noise (see figure 2 and col. 6 lines 2-9).

Remarks

6) The remaining references are of interest.

7) No claim is allowed.


8) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
March 17, 2005


STEVEN D. MAKI 3-17-05
PRIMARY EXAMINER
~~GROUP 1300~~
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